Cisco Digital Media Player 4400G

- Supports: MPEG 1, 2, and 4 part 10 in standard definition (SD) and HD, graphics, Web content, Adobe Flash 9 animation, and tickers.
- Small and lightweight: 10” x 8” x 2” at 4.5 lb.
- Local storage of 4-GB capacity.

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How is Signage Content Created?

	Source	Creation tools for On-Demand Playback	Creation tools for Live Playback
Flash Animation	• Graphics, photos, and images • PPT • HTML • Other flash animations (.swf)	• Adobe Flash 6 +	NA
HTML, Web Content	• HTML, web pages • Excel spreadsheets • RSS and Text data	• Web editors (WYSIWIG): Dreamweaver, Front Page, etc. • Excel (output to HTML)	NA
Video: MPEG1 MPEG2 MPEG4 (H.264)	• DVD (MPEG-2) • Analog formats:* (beta tape, DV-Cam) • Other digital formats: .avi, .mov, .flv, .mpg)	• Adobe Premier Pro • Apple Final Cut Pro • VLC • Sony Vegas	NA
Video: MPEG-2	• Live camera • Live cable feed	NA	• Scientific-Atlanta D9022/D9032/D9034/ D9034-S/D9054 Encoders**

* Analog formats require a beta tape or DV-Cam reader deck

** Cisco Digital Media Encoders are **NOT** currently compatible with Digital Media Players

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Acceptable Content Formats for DMP

DMD	Custom	
Yes	Yes	▪ ***Flash9*** compatible with ***Flash 6*** movie and/or ***Flash 7*** movie (.swf); flash audio support will be provided soon
Yes	Yes	▪ ECMA script (***Java Script***) version ***1.7***
Yes	Yes	▪ ***Mozilla 2.012***
Yes	Yes	▪ File formats for the animated, or still images: ***.swf*** , ***.gif, . jpg,_.png***
Yes	Yes	▪ ***MPEG 2*** encapsulated in ***Transport Stream***, High Definition (***HD***) and Standard Definition (***SD***) formats, and size depending on native resolution of your display.
Yes	Yes	▪ Supported Bit rate up to ***15 Mbit/sec*** recommended for : HD: 12 Mbit/sec - 15 Mbit/sec SD: 3 Mbit/sec - 5 Mbit/sec
Yes	Yes	▪ ***H.264 in MPEG2 container*** recommended for : HD: Approximately 6 Mbit (Min3 Mbit) SD: Approximately 5 Mbit (Min2 Mbit)
Yes	Yes	▪ ***RSS*** tickers via RSS XML

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Supported Graphics Files Formats

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Supported Graphics Files Formats: Raster versus vector graphics

Raster Graphics:

- GIF
- JPEG
- PNG

Fixed resolution *(including video)*

Vector-based Graphics:

- **SWF** (no embedded video)

Scalable resolution

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Supported Video Format MPEG-2

- ***720p*** is widely used and supported by most plasma and LCD displays. For example, 720p is used by ***ABC*** and ***ESPN*** because the smoother image is desirable for fast-action sports telecasts.
- The DMP will play all standard and high definition formats which your LCD or plasma display supports.
- Stream type: transport stream.

Transport stream

Allows multiplexing of digital video and audio and to synchronize the output

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Why h.264 codec in MPEG-2 container?

- The free VLC player from Main Concept is a recommended tool to transcode and/or “wrap” video files in the DMP preferred MPEG2 –TS format.
- There are more tools available for MPEG-2 encoding/transcoding than other MPEG versions.
- MPEG-2 supports both standard and high definition video and is the industry DVD format.
- ***Transcoding* is the direct digital-to-digital conversion from one codec to another**. VLC streamlines the conversion process.
- The h.264 codec can provide good video quality at substantially lower bit rates.

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MPEG2-TS/h.264 file size sampling Adobe
(After Effects CS3 Professional>Output module: MPEG2)

Uncompressed file size	Compression Bitrates	Mpeg2-TS Compression	Transcoded to .h.264
720x480p 610,965kb (596MB)	01Mbps	[03.6MB]	[3.3MB]
	03Mbps	[13,4MB]	[3.3MB]
	05Mbps	[13,4MB]	[3.3MB]
	08Mbps	[20.9MB]	[3.3MB]
	10Mbps	[25.9MB]	[3.3MB]
1280x760p 1,623,465kb (1.54GB)	08Mbps	[20.9MB]	[3.2MB]
	10Mbps	[26.0MB]	[3.2MB]
	15Mbps	[38.5MB]	[3.2MB]
	18Mbps	[46.0MB]	[3.2MB]
	20Mbps	[51.0MB]	[3.2MB]
1920x1080p 3,648,366kb (3.47GB)	08Mbps	[20.9MB]	[3.4MB]
	10Mbps	[25.9MB]	[3.4MB]
	15Mbps	[38.4MB]	[3.4MB]
	18Mbps	[46.0MB]	[3.5MB]
	20Mbps	[51.0MB]	[3.4MB]

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MPEG2-TS/h.264 file size sampling Adobe
(Premiere Pro CS3 > Adobe Media Encoder: H.264 format)

Uncompressed file size	Compression Bitrates	H.264 Compression	Transcoded to .h.264
720x480p 610,965kb (596MB)	01Mbps	[03.0MB]	[3.2MB]
	03Mbps	[07.4MB]	[3.1MB]
	05Mbps	[10.7MB]	[3.1MB]
	08Mbps	[15.4MB]	[3.1MB]
	10Mbps	[18.7MB]	[3.1MB]
1280x760p 1,623,465kb (1.54GB)	08Mbps	[16.2MB]	[3.1MB]
	10Mbps	[19.2MB]	[3.1MB]
	15Mbps	[28.3MB]	[3.1MB]
	18Mbps	[30.6MB]	[3.1MB]
	20Mbps	[37.3MB]	[3.1MB]
1920x1080p 3,648,366kb (3.47GB)	08Mbps	[16.6MB]	[3.3MB]
	10Mbps	[18.8MB]	[3.3MB]
	15Mbps	[28.0MB]	[3.3MB]
	18Mbps	[30.9MB]	[3.3MB]
	20Mbps	[32.6MB]	[3.2MB]

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